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PTO/SB/05 (03-01) Approved for use through 10/31/2002. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## UTILITY **PATENT APPLICATION TRANSMITTAL**

Attorney Docket No. First Inventor

5-53 C915011116

| (Only for new nonprovision                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | nal applications under 37 CFR 1.53(b))                                        | Express Mail Label No. PPO 12 113819 (13)                                                       |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--|--|
| APPLICATION ELEMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                               | ADDRESS TO: Assistant Commissioner for Patents Box Patent Application                           |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | cerning utility patent application contents.                                  | Washington, DC 20231                                                                            |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | orm (e.g., PTO/SB/17) duplicate for fee processing)                           | <ol> <li>CD-ROM or CD-R in duplicate, large table or<br/>Computer Program (Appendix)</li> </ol> |  |  |
| 2. Applicant claims s<br>See 37 CFR 1.27.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                               | Nucleotide and/or Amino Acid Sequence Submission     (if applicable, all necessary)             |  |  |
| 3. Specification (preferred arrangement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | [Total Pages [ ] ]                                                            | a. Computer Readable Form (CRF)                                                                 |  |  |
| - Descriptive title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                               | b. Specification Sequence Listing on:                                                           |  |  |
| - Statement Rega                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | e to Related Applications<br>arding Fed sponsored R & D                       | i. CD-ROM or CD-R (2 copies); or                                                                |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | equence listing, a table,<br>program listing appendix                         | ii. 🔲 paper                                                                                     |  |  |
| - Background of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | the Invention                                                                 | c. Statements verifying identity of above copies                                                |  |  |
| - Brief Summary<br>- Brief Descriptio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | of the Invention<br>n of the Drawings (if filed)                              | ACCOMPANYING APPLICATION PARTS                                                                  |  |  |
| - Detailed Descri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ption                                                                         | Assignment Papers (cover sheet & document(s))                                                   |  |  |
| <ul><li>Claim(s)</li><li>Abstract of the</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Disclosure                                                                    | 10. 37 CFR 3.73(b) Statement (when there is an assignee) Power of Attorney                      |  |  |
| 4. Drawing(s) (35 U                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | .S.C. 113) [ Total Sheets 4 ]                                                 | 11. English Translation Document (if applicable)                                                |  |  |
| 5. Oath or Declaration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | [ Total Pages 2 ]                                                             | 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449                               |  |  |
| a. Newly execu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | uted (original or copy)                                                       | 13. Preliminary Amendment                                                                       |  |  |
| b. Copy from a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | prior application (37 CFR 1.63 (d))<br>tion/divisional with Box 18 completed) | 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized)                        |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ION OF INVENTOR(S) tement attached deleting inventor(s)                       | 15. Certified Copy of Priority Document(s) (if foreign priority is claimed)                     |  |  |
| named in t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | he prior application, see 37 CFR                                              | 16 Nonpublication Request under 35 U.S.C. 122                                                   |  |  |
| 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                               |                                                                                                 |  |  |
| 6. Application Data Sheet. See 37 CFR 1.76 or its equivalent.  Other: Credit Card Payment form                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                               |                                                                                                 |  |  |
| 18. If a CONTINUING APPLI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | CATION, check appropriate box, and sup                                        | ply the requisite information below and in a preliminary amendment,                             |  |  |
| or in an Application Data She                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | _                                                                             |                                                                                                 |  |  |
| Continuation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Divisional Continuation-in-part (CIP)                                         | of prior application No.:/                                                                      |  |  |
| Prior application information: Examiner Group Art Unit: Group |                                                                               |                                                                                                 |  |  |
| Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.  The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                               |                                                                                                 |  |  |
| ·                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 19. CORRESPOND                                                                |                                                                                                 |  |  |
| Customer Number or Bar Co                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ode Label (Insert Customer No. or Attach ba                                   | or Correspondence address below                                                                 |  |  |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Frank R. Cal                                                                  | laghan                                                                                          |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                               | ad                                                                                              |  |  |
| Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                               |                                                                                                 |  |  |
| City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ridgewood                                                                     | State NJ Zip Code 67450                                                                         |  |  |
| Country                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | U.S.A. Tel                                                                    | ephone 201.251.8285 Fax                                                                         |  |  |
| Name (Print/Type)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Frank R. callagh                                                              | Registration No. (Attorney/Agent)                                                               |  |  |
| Signature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Frank R. Coll                                                                 | When Date 4/18/01                                                                               |  |  |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual base. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application. Washington, DC 20231.

PTO/SB/17 (11-00)
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## **FEE TRANSMITTAL** for FY 2001

Patent fees are subject to annual revision.

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| Complete if Known    |      |      |                |      |
|----------------------|------|------|----------------|------|
| Application Number   | 60   | 1199 | ,061           |      |
| Filing Date          | ADV  | 1/20 | 2-060          |      |
| First Named Inventor | Fran | KR   | ,2000<br>Calla | ghan |
| Examiner Name        |      |      |                | )    |
| Group Art Unit       |      |      |                |      |
| Attorney Docket No.  |      |      |                |      |

| METHOD OF PAYMENT                                                                                 | FEE CALCULATION (continued)                                                              |          |  |  |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------|--|--|
| 1. The Commissioner is hereby authorized to charge indicated fees and credit any overnayments to: | 3. ADDITIONAL FEES                                                                       |          |  |  |
| indicated fees and credit any overpayments to:  Deposit                                           | Large Small                                                                              |          |  |  |
| Account<br>Number                                                                                 | Entity Entity Fee                                    | Fee Paid |  |  |
| Deposit                                                                                           | Code (\$) Code (\$)                                                                      | - Talu   |  |  |
| Account Name                                                                                      | 105 130 205 65 Surcharge - late filing fee or oath                                       |          |  |  |
| Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17                                     | 127 50 227 25 Surcharge - late provisional filing fee or cover sheet                     |          |  |  |
| Applicant claims small entity status.                                                             | 139 130 139 130 Non-English specification                                                |          |  |  |
| See 37 CFR 1.27                                                                                   | 147 2,520 147 2,520 For filing a request for ex parte reexamination                      |          |  |  |
| 2. A Payment Enclosed:  Check C Credit card Money Other                                           | 112 920* 112 920* Requesting publication of SIR prior to Examiner action                 |          |  |  |
| FEE CALCULATION                                                                                   | 113 1,840* 113 1,840* Requesting publication of SIR after Examiner action                |          |  |  |
| 1. BASIC FILING FEE                                                                               | 115 110 215 55 Extension for reply within first month                                    |          |  |  |
| Large Entity Small Entity                                                                         | 116 390 216 195 Extension for reply within second month                                  |          |  |  |
| Fee Fee Fee Fee Description Code (\$) Code (\$) Fee Paid                                          | 117 890 217 445 Extension for reply within third month                                   |          |  |  |
| 101 710 201 355 Utility filing fee 355                                                            | 118 1,390 218 695 Extension for reply within fourth month                                |          |  |  |
| 106 320 206 160 Design filing fee                                                                 | 128 1,890 228 945 Extension for reply within fifth month                                 |          |  |  |
| 107 490 207 245 Plant filing fee                                                                  | 119 310 219 155 Notice of Appeal                                                         |          |  |  |
| 108 710 208 355 Reissue filing fee                                                                | 120 310 220 155 Filing a brief in support of an appeal                                   |          |  |  |
| 114 150 214 75 Provisional filing fee                                                             | 121 270 221 135 Request for oral hearing                                                 |          |  |  |
|                                                                                                   | 138 1,510 138 1,510 Petition to institute a public use proceeding                        |          |  |  |
| SUBTOTAL (1) (3) 355                                                                              | 140 110 240 55 Petition to revive - unavoidable                                          |          |  |  |
| 2. EXTRA CLAIM FEES Fee from                                                                      | 141 1,240 241 620 Petition to revive - unintentional                                     |          |  |  |
| Extra Claims below Fee Paid                                                                       | 142 1,240 242 620 Utility issue fee (or reissue)                                         |          |  |  |
| Total Claims 21 -20** = X 4 = 4                                                                   | 143 440 243 220 Design issue fee                                                         |          |  |  |
| Independent S - 3" = S X 46 = 200                                                                 | 144 600 244 300 Plant issue fee                                                          |          |  |  |
| Multiple Dependent (35) = 135                                                                     | 122 130 122 130 Petitions to the Commissioner                                            |          |  |  |
| 1 F-66- 0 . H. F. d.                                                                              | 123 50 123 50 Processing fee under 37 CFR 1.17(q)                                        |          |  |  |
| Large Entity Small Entity Fee Fee Fee Fee Fee Description                                         | 126 180 126 180 Submission of Information Disclosure Stmt                                |          |  |  |
| Code (\$) Code (\$)<br>103 18 203 9 Claims in excess of 20                                        | 581 40 581 40 Recording each patent assignment per property (times number of properties) |          |  |  |
| 102 80 202 40 Independent claims in excess of 3                                                   | 146 710 246 355 Filling a submission after final rejection                               |          |  |  |
| 104 270 204 135 Multiple dependent claim, if not paid                                             | (37 CFR § 1.129(a))                                                                      |          |  |  |
| 109 80 209 40 ** Reissue independent claims over original patent                                  | 149 710 249 355 For each additional invention to be examined (37 CFR § 1.129(b))         |          |  |  |
| 110 18 210 9 ** Reissue claims in excess of 20                                                    | 179 710 279 355 Request for Continued Examination (RCE)                                  |          |  |  |
| and over original patent                                                                          | 169 900 169 900 Request for expedited examination of a design application                |          |  |  |
| SUBTOTAL (2) (\$) 344                                                                             | Other fee (specify)                                                                      |          |  |  |
| **or number previously paid, if greater; For Reissues, see above                                  | *Reduced by Basic Filing Fee Paid. SUBTOTAL (3)                                          |          |  |  |

| SUBMITTED BY      |                                     | Complete (if applicable) |
|-------------------|-------------------------------------|--------------------------|
| Name (Print/Type) | Frank R. Callaghan Registration No. | Telephone 201.251.8285   |
| Signature         | truck Callellar                     | Date 4 18/01             |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.